

## **ABSTRACT**

A modem receiver for receiving signals having a frequency domain equalizer training module (FTM) being responsive to a frequency channel response for processing the same to generate one or more frequency domain equalizer (FEQ) coefficients, said modem receiver being responsive to an input signal for processing the same to generate said frequency channel response, said input signal being generated from transmission of a transmitted signal, said frequency channel response for including one or more pilot tones, said FEQ coefficients for including one or more pilot tone FEQ coefficients, in accordance with an embodiment of the present invention. The modem receiver further includes an offset weight determination (OWD) module being responsive to said pilot tone FEQ coefficients for processing the same to generate one or more carrier weights, said modem receiver for using said carrier weights to generate a carrier offset, said OWD module for using said pilot tone FEQ coefficients to generate one or more timing weights, said modem receiver for using said timing weights to generate a timing offset, said modem receiver for reducing the effects of faded pilot tones on determination of said timing offset and said carrier offset between said transmitted signal and said input signal.